Implement a function that calculates the factorials of N. Then call that function inside the main function to assign the calculated value to the variable result.

Input:

* int N: a natural number N

Template:

#include <iostream>

using namespace std;

// implement calculate factorial function in here

# TODO

int main(int narg, char\*\* argv)

{

int N;

cin >> N;

long result;

// call function calculate factorial in here and assign value to the variable result

# TODO

cout << result << endl;

return 0;

}

**For example:**

| **Test** | **Input** | **Result** |
| --- | --- | --- |
| 1 | 5 | 120 |